

ABSTRACT OF THE DISCLOSURE

An information encoding apparatus for encoding N pieces of information, the information encoding apparatus
5 includes a scrambling pattern generation section for generating M scrambling patterns ($N > M \geq 1$; where M and N are each an integer); a scrambled information generation section for applying, to each of the N pieces of information, one corresponding scrambling pattern among the M scrambling
10 patterns so as to generate N pieces of scrambled information; and an encoded information generation section for supplying the N pieces of scrambled information with N parities, respectively, so as to generate encoded information. Each of at least one of the M scrambling patterns is applied to
15 two or more of the N pieces of information.